

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number
WO 2005/001811 A1

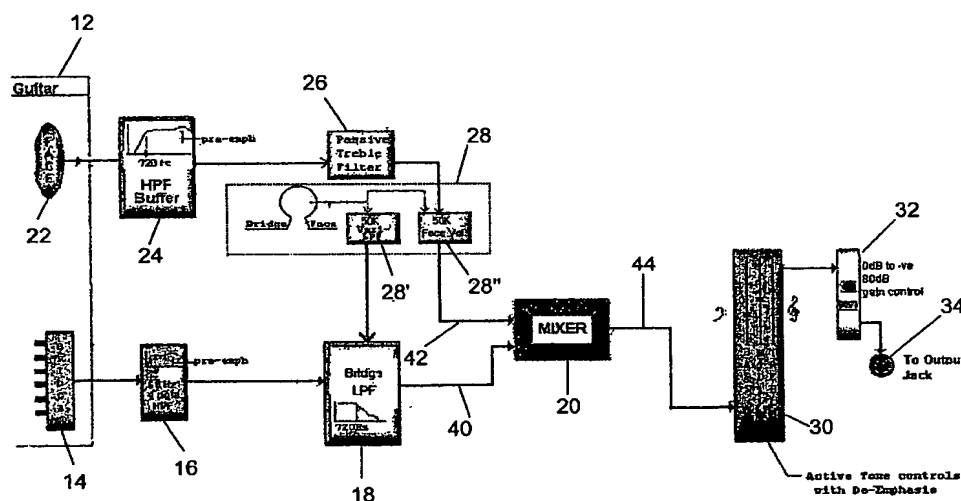
- (51) International Patent Classification⁷: **G10H 3/18**
- (21) International Application Number:
PCT/AU2004/000858
- (22) International Filing Date: 28 June 2004 (28.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
2003903326 27 June 2003 (27.06.2003) AU
- (71) Applicant (for all designated States except US): **AUS-
TRALIAN NATIVE MUSICAL INSTRUMENTS PTY
LTD** [AU/AU]; Factory 3, 7 Clare Street, Bayswater,
Victoria 3153 (AU).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **CLARK, Bradley,
Roy** [AU/AU]; Factory 3, 7 Clare Street, Bayswater,
Victoria 3153 (AU).
- (74) Agent: **WATERMARK PATENT & TRADEMARK
ATTORNEYS**; 290 Burwood Road, Hawthorn, Victoria
3122 (AU).

- (81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.
- (84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: AMPLIFICATION OF ACOUSTIC GUITARS



(57) Abstract: A device for mixing the outputs of two sensors. The device includes a first input for receiving a signal from at least one first sensor, a second input for receiving a signal from at least one second sensor, a low pass filter for passing signal components of the first input signal below a first frequency, a high pass filter for passing signal components of the second input signal above a second frequency and a mixing circuit for combining the signals passed by the low pass filter and the high pass filter to form a combined output signal. The mixing device may be incorporated into a pre-amplifier for use with an electrified acoustic guitar, or other acoustic stringed instrument, having an under saddle sensor and a second sensor attached to a body portion of the guitar, such as the soundboard. In this way, lower frequencies are taken from the under saddle sensor and higher frequencies are taken from the body/soundboard sensor.